

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A peptide-polymer conjugate comprising a polymer to which is covalently attached ~~operably bound no less than two or more molecules of~~ synthetic peptides, ~~wherein each molecule of synthetic peptide is operably bound to the polymer via a reactive functionality, wherein each synthetic peptide comprises an amino acid sequence derived from the a heptad repeat region of Human Immunodeficiency Virus (HIV) gp41~~ heptad repeat region one (HR1), two (HR2), or a combination thereof, wherein said HR1 peptides consist of synthetic peptide comprises an amino acid sequence between of no less than about 16 amino acids and no more than about 60 amino acids and said HR2 peptides consist of an amino acid sequence between 16 and 64 amino acids, and wherein the conjugate has greater antiviral activity as compared to the unconjugated ~~durability comprising antiviral activity against HIV strains resistant to synthetic peptide alone.~~

Claim 2 (original): The conjugate according to claim 1, wherein the polymer comprises a molecular weight in a range of molecular weights of from about 200 daltons to about 20,000 daltons.

Claim 3 (original): The conjugate according to claim 2, wherein the polymer comprises polyethylene glycol comprising a specific number of ethylene units.

Claim 4 (original): The conjugate according to claim 1, wherein each synthetic peptide of the conjugate comprises an amino acid sequence derived from the HR1 region of HIV gp41.

Claim 5 (original): The conjugate according to claim 4, wherein each synthetic peptide of the conjugate comprises an identical amino acid sequence.

Claim 6 (original): The conjugate according to claim 1, wherein each synthetic peptide of the conjugate comprises an amino acid sequence derived from the HR2 region of HIV gp41.

Claim 7 (original): The conjugate according to claim 6, wherein each synthetic peptide of the conjugate comprises an identical amino acid sequence.

Claim 8 (original): The conjugate according to claim 1, wherein at least one molecule of synthetic peptide of the conjugate comprises an amino acid sequence derived from the HR1 region of HIV gp41, and wherein at least one molecule of synthetic peptide of the conjugate comprises an amino acid sequence derived from the HR2 region of HIV gp41.

Claim 9 (currently amended): The conjugate according to claim 1, wherein the ~~molecules of synthetic peptides~~ ~~peptide~~ are covalently attached ~~operably bound~~ to the polymer via a portion of each synthetic peptide selected from the group consisting of an N-terminus, a C-terminus, and an internal lysine.

Claims 10-18 (canceled)

Claim 19 (withdrawn): A method of inhibiting transmission of HIV to a target cell, the method comprising adding to the virus and the cell a conjugate according to claim 1 in an amount effective to inhibit infection of the cell by the virus.

Claim 20 (withdrawn): A method of inhibiting transmission of HIV to a target cell, the method comprising adding to the virus and the cell a conjugate according to claim 2 in an amount effective to inhibit infection of the cell by the virus.

Claim 21 (withdrawn): A method of inhibiting transmission of HIV to a target cell, the method comprising adding to the virus and the cell a conjugate according to claim 3 in an amount effective to inhibit infection of the cell by the virus.

Claim 22 (withdrawn): A method of inhibiting transmission of HIV to a target cell, the method comprising adding to the virus and the cell a conjugate according to claim 4 in an amount effective to inhibit infection of the cell by the virus.

Claim 23 (withdrawn): A method of inhibiting transmission of HIV to a target cell, the method comprising adding to the virus and the cell a conjugate according to claim 5 in an amount effective to inhibit infection of the cell by the virus.

Claim 24 (withdrawn): A method of inhibiting transmission of HIV to a target cell, the method comprising adding to the virus and the cell a conjugate according to claim 6 in an amount effective to inhibit infection of the cell by the virus.

Claim 25 (withdrawn): A method of inhibiting transmission of HIV to a target cell, the method comprising adding to the virus and the cell a conjugate according to claim 7 in an amount effective to inhibit infection of the cell by the virus.

Claim 26 (withdrawn): A method of inhibiting transmission of HIV to a target cell, the method comprising adding to the virus and the cell a conjugate according to claim 8 in an amount effective to inhibit infection of the cell by the virus.

Claim 27 (withdrawn): A method of inhibiting transmission of HIV to a target cell, the method comprising adding to the virus and the cell a conjugate according to claim 9 in an amount effective to inhibit infection of the cell by the virus.

Claim 28 (withdrawn): The method according to claim 19, wherein the conjugate inhibits fusion between the virus and the target cell in inhibiting infection of the cell by the virus.

Claim 29 (withdrawn): The method according to claim 19, wherein the conjugate further comprises a pharmaceutically acceptable carrier.

Claim 30 (withdrawn): The method according to claim 29, wherein the conjugate is administered to an HIV-infected individual.